Pathology of Pregnancy Due to Dam

① Pseudo-Pregnancy. ② Heat During Pregnancy. ③ Abnormal Secretion During Pregnancy. ④ Increased Birth Pain During Pregnancy. ⑤ Insufficient Closure of Cervix. ⑥ Vaginal Prolapse. ⑦ Hernia during Pregnancy. ⑧ Uterine Torsion. ⑨ Telogony.

Item	① Pseudo-pregnancy	② Heat During Pregnancy
Def.:	A♀ shows external signs of Pregnancy However, A♀ isn't Pregnant.	A♀ shows signs of heat Although the A♀ is Pregnant
Incidence:	Common in Bitch ∵ length of gestation Period is Similar to the luteal phase (8-9 weeks).	Common in Cow, Buffalo, sheep, goat. Very Rare in Mares.
Causes:	① Hormonal Distrubance: After end of luteal Phase → ↓ progestrone, ↑ Prolactine ↓ lead to • Development of mammary gland. • Dropping of Milk. • Aggressive. • Nest Building. • Vomition. • Mothering of Toys → handling For inanimate objects. ② May occur Due to unexperienced vet → may make Spaying (Removal of CL) During luteal Phase. ovary ♂ CL → progestrone sharp ↓ Removal → ↓ progestrone → ↑ prolactin.	① Hormonal Distrubance: ↑ gonadotropins (FSH, LH) stimulate ↓ Follicular growth ↑ estrogen ↓ Show heat signs But, Not Sufficient to Make Abortion.

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Trt:.	① Cold Fomentation on mammary gland. ② ↓ Feed 6-10 hrs. Daily. ③ Cone Collar → Restrict Bitch movement toward inanimate object. ④ Hormonal Trt → injection 2-10 mg testestrone daily till Become Normal.	① Progestrone Supplementation. ② Having Records. ↳ very essential For overcoming Faulty AI or Mating During Pregnancy.
Others:.	other Names:. ↳ False Pregnancy. ↳ Histrical Pregnancy.	Economic importance (Results):. ① Culling From herd. ② Cost of Semen Sample. ③ Abortion. ④ Macerated Fetus Due to intrauterine infusion.

③ Abnormal Vaginal Secretion During pregnancy:.

- Normally → No Vaginal discharge During pregnancy and Cervix tightly Closed with Cervical plug So, any discharge indicates Disease of genital tract.
- It's important in Case of Discharge, to Detect its Source
  (as) Vagina Common Coarse For uterus and urinary Bladder.
- In Mare → Bleeding during urination Due to → enlarged Vaginal Vein.

Discharge:. ← Cervix, Cervical plug, ← u.B
- ↳ u.B.
- ↳ uterus.
- ↳ Vagina.

Types:.

① Purulent discharge (pus)		② Bloody discharge	
Vagina	uterus	Vagina	uterus
Vaginitis	open Pyometra	Rupture of Vaginal hematoma or injury due to hard manipulation.	endometrium injury or infection
Trt By Vaginal Douch.	Trt By pGF2α and uterine wash (or) Induction of Abortion.		Trt By Induction of Abortion

- why Bleeding in apart of placenta (2) more dangerous in Mare than Cow ??

Cow	Mare
• Type of placenta:. ↳ Cotyledonery.	• Type of placenta:. ↳ Diffuse placenta.
• If Bleeding occur:. ↓ • Stop of Bleeding By mechanical Haemostasis due to Forceful attachment Between endometrium and Fetus (placentome).	• If Bleeding occur:. ↓ • Diffusing of Bleeding along Coarse of placenta Due to weak attachment. • Blood Press on placenta until Complete Separation occur According to its site → Abortion.
 Bleeding ↓ stop.	 Bleeding. ↓ Diffuse.

(2)

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④ Increase Birth Pain During Pregnancy

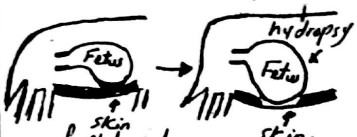
- **Def**:
  Birth Pain often Occur Before Parturition.
- **Causes**:
  → Mainly Rectum, Vaginal Problems.
  ① Vaginal Prolapse.
  ② Vaginitis.
  ③ unhygienically vaginal Ex.
  ④ ttt By irritant Purgative
  ⑤ turpentine oil → Cause Problems During Defecation.
  ⑤ straining Due to long Transpiration.
  ⑥ Chill or Catching Cold.
- **Symptoms**:
  ① straining. ② Restlessness.
  ③ Colic in Mare.
- **Sequelae**:
  ① Vaginal Prolapse. ② Abortion.
  ③ Rupture of uterus.
- **Diagnosis**:
  → ① Case history + signs.
  → ② Vaginal Examination → Closed Cervix.
- **ttt**:
  ① Avoid irritant Drugs.
  ② epidural anathesia.
  ③ Analgesics.

⑤ Insufficient Closure of Cervix

- Normally → Cervix is tightly closed During Pregnancy, opens only during estrus or Parturition.
- Abnormally → Cervical seal may opened either Partial or Complete Result in → Habitual Abortion.
- **Causes**:
  ① Mal Formation of Cervix.
  ② Tumor in Cervix.
  ③ old injury During Parturition or Fetotomy.
  → healing by 2nd intension → stiffness → spaces in Cervix → incomplete closure.
  ④ Hormonal Distrubance
  → ↑ estrogen, ↓ progestrone.
  ⑤ Advanced Cases of pneumovagina and vaginal Prolapse.
  → All these Result in enterance of M.o → pregnancy distrubance.
- **ttt**:
  ① If at end of Pregnancy → Isolation, Progestron injection to Support Pregnancy.
  ② If at early of Pregnancy → Induction of Abortion.

⑥ Hernia During Pregnancy

- **Causes (predisposing Factor)**:
  ① old Age A.
  ② weak Abdominal wall.
  ③ ↑ Fetal Fluid (hydropsy) → 80-120L.
  ↓
  Rupture of Abdominal wall Muscles and Linea Alba with intact skin → Hernia



- During Abdominal palpation → you Can → Palpate Fetal parts.
- Common in Ewes Due to Multiple Fet.
- **ttt**:
  ① If occur Nearly Parturation → C-section.
  ② If occur in early pregnancy → Induction of Abortion.

⑦ Telogony

Tel → Fal
gonus → offspring.

- Misbelief which transmitted to Dog owners → when mongrel (street) Dog and Foreign Bitch are married → offspring of Bad objectives, thought that these objectives From mongrel Dog And when these Bitch married Foreign Dog → Bad objectives offspring Due to the 1st mongrel Dog which Cause → uterus Tainting.
- Its a large Mistake ⑤ offspring obtain their genes From Male, Female By equal % Congenitally and uterus For Nutrition only.

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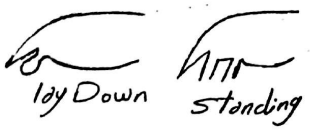
⑧ Vaginal Prolapse :: انزلاق المهبل

- **Def**::
  Protrusion
  - part of the vagina.
  - OR All vagina outside the vulva.

  May occur → Preportum (Common).
  → Postportum.

- **Types**::

Partial Prolapse	Complete prolapse
• Protrusion Part of vagina outside vulva.	• Protrusion the whole vagina outside vulva.
• Size → small Melon.	• Size → large Melon.
• Appear only when A' laying Down Due to ↑ intra-abdominal Pressure. 	• Appear in laying Down and standing Position. 
• If egnored → Compelete Prolapse.	• If egnored → Dryness of vagina → Necrosis / gangerene.

- **Signs**::

① Swelling of vagina → which ↑ Due to late Prolapse (3-5 hrs) and may include urinary Bladder ↝ in which ↑ urine and Circulation is stopped at the Same Time Due to Pressure on Ischial Arch.

② Covered By Feces due to straining During Defecation.

③ May show Contusion, laceration, Necrotic Area.

④ Injures Due to Picking of Rat or Ducks → Perforating wound → reach Blood vessels → Bleeding → Death.

⑤ large Necrosis → Bad general health Condition

⑥ Cervix → open → Pre-mature Birth.

- **Causes**:: ① **Predisposing Causes**::
  ① stall slope. ② over Fattening.
  ③ straining During Parturation. ④ heridatory Cause.
  ⑤ straining After Parturation (vaginitis).
  ⑥ ↑ Intra-Abdominal Pressure Due to:.
  - Colic - Constipation.
  - late stage Pregnancy especially Twins.

  ⑦ Feed on Bad Hay → Toxin → has estrogen-like effect → Relaxation of Pelvic ligament.

  ② **Main Cause**:: Hormonal distrubance → ↑ estrogen, Relaxin → Relaxation of vaginal wall. / Relaxation of pelvis.

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Treatment :

① Partial Prolapse.

① washing of Protruded Part.
② Covering it By Antibiotic → lignoCaine ointment.
③ insert the Protruded Part.

② Complete Prolapse.

① Caudal epidural Anathesia.
② Catheterization of urinary Bladder.
③ washing By warm water.
④ Reduction Site By Alum 2% massage.
⑤ Suturing any wound if present.
⑥ Application of Antibiotic emulsion.
⑦ Carefully, step by step → Try to Reduce Prolapsed Part By the Feast of hand
⑧ To Avoid Penetration of M.M By your Fingers.
⑧ Suturing 2 labia of the vulva (By):

① Vulvar Truss

Metal or leather Piece applied to vulva and Fixed By Ropes Around the Neck.

But, Cause Contamination By Feces, urine.

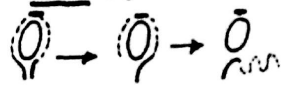
② Horizontal mattress

But, may Cause Ulceration.

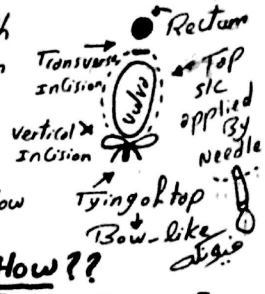
③ Buhner's Suture

- The Best one.

① insert needle From one side with Tap (s/c) then Pull → insert again → Pull Tying → Bow-like.
② Closure of transverse Incision.
③ Closure of vertical Incision → leave an open → Finger Size (to) Allow urine Passage
④ After 7-10 Days Remove Tap .. **How??**
Ⓐ Pull Bow.
Ⓑ Cut one end and discard it.
Ⓒ Pull From other end to Avoid infection.



- **Transverse Incision ... why??**
To Avoid it's Increasing During straining.



→ Difference Between :-

Vaginal inversion	Vaginal Prolapse
wall of vagina inverted inside the lumen of the vulva + shinny.	Protrusion of lateral, Dorsal and Ventral (Floor) walls of the vagina outside vulva.

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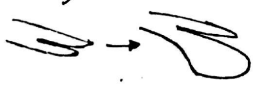
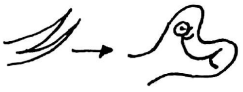
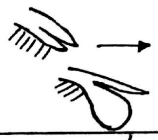
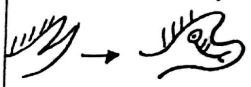
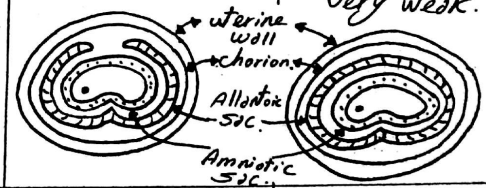
⑧ Uterine Torsion :. التواء

- **Def**:.
  - Rotation of the Pregnant uterus Around its longtudinal Axis → narrowing of soft Birth Canal (Vagina, Cervix) → Dystocia.
- **Uterine Version**:.
  - Twisting of uterus Around it's Transverse Axis.
- **Incidence of uterine Torsion**:.
  - Cow, Buffalo → More Common.
  - ewe, Doe → Rare.
  - Mare → Very very Rare.
- **Causes of uterine Torsion**:.
  - ① Actual Causes:.
    - Strong or Sudden violence movement of fetus.
    - Swimming / Drinking From Canal.
    - During standing or laying Down.
    - slippery of the Animal.
  - ② Predisposing Factors:.

More Common in Cow than Mare ... why??

item	Cow	Mare
① Type of pregnancy	uni Cornual Pregnancy → gravid horn and Non gravid horn. 	Bi Cornual → equal Distribution of Fetus in 2 horns and Body. 
② Broad ligament attachment	attached to lesser Curvature By Progress of Pregnancy → out of Fixation. 	attached to lesser Curvature By Progress of Pregnancy → ① Fixation of uterus Due to ① stiffness and Force of Broad ligament → uterus → hanged 
③ Fetal Membranes	Fetus Completely Surrounded By 2 layers → Allantoic Sac → 80% and During violence movement of Fetus ↓ Directly Reach to wall of uterus.	Fetus Completely Surrounded By 3 layers and During violence movement of Fetus ↓ Movement reach to uterine wall But, very weak. 
④ physiological Behaviour	During standing or laying Down start By 2 hind limb then 2 fore limb → Result in	During standing occur By 4 limbs Together → Rare chance of uterine Torsion.

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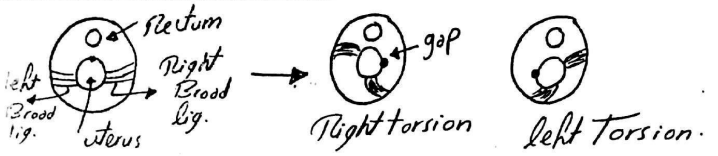
Displacement of All Abdominal Viscera Forward which give large space For uterus → ↑ chance of uterine Torsion.

• Time :.

During Pregnancy	During Parturation
• At 3rd trimester 7-9th • Closed Cervix.	• open Cervix.

• Direction :.

Right Torsion	left Torsion
• Vaginal Fold → starts From left side and ends By Right one ((Vaginal Ex.))	• Vaginal Fold → starts From Right side and ends By left one ((Vaginal Ex.))
• Broad ligament opposite to Side of Torsion (left) will Be stretched Above uterus and Forming gap in the same Direction of Torsion (Right) and Right) Broad ligament stretched under the Cervix. ((Rectal Ex.))	• Broad ligament opposite to side of torsion (Right) will Be stretched Above uterus and Forming gap in the same Direction of Torsion (left) and (left) Broad ligament stretched under the Cervix. ((Rectal Ex.))

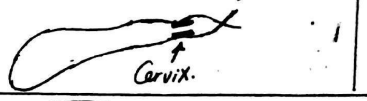


• Degree of Torsion :.

Light (Mild)	Moderate	severe
• 45 - 90° • Signs may Not appear.	• 90 - 180° • Signs Sure appears	• > 180°

• Types (site) of Torsion :.

Pre Cervical	Post Cervical
• Common. • examined By → Rectal Ex. ↘ Vaginal Ex.	• less Common. • examined By Rectal Ex. only.



• Signs :.

① Cessation of Rumination.
② Tympony.
③ Constipation Due to Pressure on Rectum.
④ Colic Symptoms
- → Restlessness.
- → straining.
- → Kicking of Abdomen.
- → looking Backward to ward Abdomen

⑤ owner usually think that there's a problem in Digestion (GIT Disturbance)

• Diagnosis :.

① Case history
- → Pregnant A١ → late stage.
- → Suffer From Colic.
- → loss of appetite.
- → Normal temp.

② Signs → تشنج
③ Vaginal Ex → Site, Direction تشنج
④ Rectal Ex → Degree, Direction تشنج

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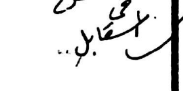
Treatment :-

Torsion During Parturation	Torsion During Pregnancy
• In which Cervix is opened. • Fetal parts may appears. • Mostly light or Mild degree. ↓ Easily Re-torsion and Correction ↓ Direct Re-torsion of the uterus in the standing Position (By) Direct Rolling of the Pregnant uterus in adirection opposite to that of Torsion.	① Pre-Cervical Torsion ↓ C-section only. • which Diagnosed only By Rectal Ex. ② Cervical Torsion 

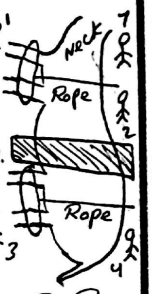
• Difference Between :-

	Complete Vaginal Prolapse	Uterine Prolapse
Case history	Before or After Parturation.	only After Parturation.
Size	Small.	large.
Consistency	Smooth.	Rough.
Placenta	Not Found.	May Found.
External os	Seen in Center	Not seen.

② TTT of Cervical Torsion :-

In Direct Re-torsion By Rolling the mother in the Same Direction of the Torsion.

→ (A) Rolling technique :-



① examine the Cow to Determine the direction of the torsion.
② epidural Anathesia. 5 cm piece of wood.
③ washing of external genitalia.
④ Cow is Casted on the Same Side as the direction of the Torsion.
⑤ Two hind leg are tied together By Rope also, 2 Fore legs, each Rope is held to 2 men
⑥ neck Fixed By another Men.
⑦ Vet:- introduce his hand in the vagina → Fix Spiral Fold of the vagina (>180° / Closed Cervix)
→ Try to grasp Fetus to Fix the Pregnant uterus (<180° / Cervix partially opened).
⑧ Give the order For Rolling same Direction of the Torsion of the uterus → Slowly.

→ (B) Modification of Rolling tech. (Schaller's Method) :-

↳ Application of a wide plank of wood (2-3 m long, 30 Cm wide) to the flank of Casted Cow with other end Resting on the ground.
↳ An assistant Rests on the plank nd which Rest on the ground while, the Cow is slowly turned over Pulling the legs Ropes → Fixation holding Not More 45kg (To) Avoid Rupture of uterus.

Q) In long standing uterine Torsion, Cow going For slaughter ... why ??

① Transudate which Formed Due to Inflammation or For any Cause which Contains Fibrin → leading to Adhesion of uterus with all Surrounding Viscera, even if you make C-section → Difficult to Re-torsion.
② May occur Mummification (Closed Cervix)

Q) If you diagnose True uterine Torsion and Roll the Cow true But, No Response what the Cause?

due to some slight Adhesion

How Can you Deal?

Roll left Firstly then Right → In Case Right Torsion.
Roll Right Firstly then left → In Case left Torsion.

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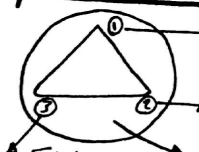
Dystocid

• Parturition Process :-



1 → Dam.
2 → Fetus.
3 → Fetal membranes.
4 → Managemental (environmental) Condition.

• Role of Dam :-

- Normal Birth Pain.
- Normal Birth way.
  - Soft Birth way.
  - Bony Birth way.

• Role of Fetus :-

- Normal development.
- Normal P.P.P.
- Normal Size.
- Normal Number of Feti.
- Viability.

• Role of Fetal Membranes :-

- hydrolic Pressure → Cervix Dilatation
- Slippery of genital tract → After Rupture.

• Managemental (environmental) :-

- Nutrition.
- observation.
- Interference → proper time, hygienic

• Any Distrubance in one of the Previous → dystocid.

Dystocid :-

↳ Abnormal labour / Birth.

OR Presence of any obstacle that Prevents self-expulsion of the Fetus to outside.

Causes of Dystocid :-

① Congenital (heridatory)
- Associated to Dam.
- " " Fetus.
- " " Fetal membranes.

② Infectious Causes → Dam, Fetus, Fetal membranes

③ Hormonal Causes.

④ Managemental Causes
- long transportation.
- hard working.
- Trauma.

⑤ Nutrition Deficiency
- underfeeding → ill developed genital tract → Narrow pelvis.
- overfeeding
  - excessive Fat deposition in genital tract.
  - over Size of Fetus.

⑥ Miscellanous Causes
↳ Preparturient Paresis.

OR

① Distrubance Arising From Dam.
② " " " Fetus.
③ " " " Fetal membranes.
④ " " " Managemental Condition.

① Distrubance Arising From (Maternal) Dam :-

(Causes)
- AbNormal Bony Birth way.
- AbNormal Soft Birth way.
- AbNormal Birth Pain.

ⓐ Abnormal Bony Birthway

Juvenile Pelvis	Narrow Pelvis
• the pelvic cavity of ♀ Before Reaching Sexual Maturity.	• Narrowing of pelvic cavity of ♀ Due to Poor Nutrition or poor Development Inspite reaching sexual maturity.
Causes :- ↳ Pre-mature Breeding of ♀ Just After puberty Before reaching Maturity.	**Causes :-** ↳ Nutrition deficiency. ↳ chronic debilitating Disease.
III :- only C-section.	**III :-** ① Traction. ② Fetotomy → dead Fetus. ③ C-section → live Fetus.

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(13) Abnormal Birth Pain :.

① weak Birth Pain (uterine inertia)

- **Def** :.
  weak or absence of Birth Pain During or Just After Parturation.
- **Types** :.

① Primary uterine inertia

Def :. weakness or absence of Birth Pain From stating the Birth.

Causes :.
① Hormonal Distrubance
↳ Defect in PGF2α, oxytocin, estrogen.
↳ Defect in Ratio Between estrogen, Progestrone
② Defect in Receptors. ③ Defect in Calcium.
④ Abnormality in Abdominal, uterine Muscles.
⑤ Chronic debilitating Disease (as) T.B.
⑥ overstretching of uterus → Hydropsy. → Twinning.
⑦ High Protein in Diet in late stage of Pregnancy.
⑧ Painful Sensation (as) Traumatic Pericarditis.

Diagnosis :. Prolonged 2nd stage of labour.

Prognosis :. Favourable → especially in early stage

② Secondary uterine inertia

weakness or absence of uterine Contraction After aperiod of long Birth Pain Due to → unsuccessful Birth or exhausted Animal.

All Causes of Dystocia.

unfavourable Due to → death of fetus. → uterine rupture. → Infection of fetal membranes.

② Powerful (strong) Birth Pain

Def :.
highly Contraction of uterine and Abdominal muscles lead to
↳ asphaxia → Fetal death.
↳ Rupture of uterus.

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(III):: ① estrogen, oxytocine, PGF2α. ② Ca therapy. ③ Dexamethasone. ④ Manual Dilatation → More. ⑤ Induction of Abortion. ⑥ Small A → No infection → C-section. ⑦ Traction (Forcible Pulling of Fetus).

III of Primary Cause.

① Caudal epidural Anathesia. ② Rapid extraction of Fetus. (II)

⑤ Distrubance of Soft Birth way:: ⑥ Uterine Torsion

① Tumors

- Tumors of → Vagina. → Uterus.
- III → only C-section. ⊕ Culling

② Congenital Anomalies

- As → persistant hymen. → Fleshy Pillar. → Double Cervix. → Double vagina.
- III → only C-section. ⊕ Culling.

③ Dryness of Birth way

- Causes:: → early Rupture of Fetal membranes. → Delayed interference in Case of Dystocia.
- III:: → Introduction of Sufficient Amount of Artificial Fetal Fluids.

④ Uterine Rupture

① prenatal

Causes:: → weakness of uterine wall + Abnormal movement of Fetus:: → long standing uterine Torsion. → Trauma.

② postnatal

Causes:: → Abnormal P.P.P. → Abnormal Handling → Faulty using of instrument. → Faulty extraction of Fetus.

- Rupture (at) → great Curvature of uterus with → Part of Cervix or → Dorsal wall of vagina.
- Clinical signs:: ① lay Down → grunting. ② ↓ temp. ③ straining.
- III:: ① Laparotomy ② Suture of Ruptured Part.

⑤ Narrowing of Soft Birth way (Cervix) (II)

- Def → Failure of Cervix to be Completely dilated during Parturation.
- Causes → pre-mature Birth → Abortion. → previous injury (Fibrous tissue Formation) → uterine inertia → ↓ hormonal defect → PGF2α, estrogene, oxytocin.
- Vaginal examination::
- 1st degree → Allow passage of head of Fetus, one Fore limb.
- 2nd degree → allow passage of head of embryotome and hand of operator.
- 3rd degree → pass 1-3 Fingers.
- 4th degree → Compeletly closed.
- III:: ① Manual dilatation → More. ② Induction of Abortion. ③ Fetotomy → 1st degree, dead Fetus

⑥ عالج III بناع وقم

④ C-section → 2nd, 3rd, 4th degree, Dead or alive Fetus. → 1st degree, alive Fetus.

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② Distrubance Arising From Fetal Membranes

① Early Rupture of Fetal membranes

- Both Fetal Sacs open Before Complete Dilatation of Cervix.
- **Causes**:.
  1. Severe Birth Pain especially In Case of → over-thinned Fetal membranes.
  2. Managemental Causes.
- **Clinical signs, sequlea**:.
  1. vaginal discharge with incomplete Cervical Dilatation.
  2. Dry Birth Canal.
  3. Incomplete Rupture of Fetal membranes → Allantoic → 12-15L; Amniotic → 3-5L
  4. Laceration → oozing of vaginal Discharge For long time.
- **TTT**:. (As) TTT of Incomplete Cervical Dilatation.
  1. epidural Anesthesia.
  2. Douching of Artificial Fetal Fluid.
  3. Manual massage of Cervix.
  4. Traction → Complete Dilatation.
  5. C-section → live Fetus.
  6. Fetotomy → Dead Fetus.
- **Prognosis**:.
  1. early Detection → Good.
  2. late Detection
     - in Cow → More than 6 hr. → Bad Prognosis
     - Infection, Fetal Death.

② Too Firm Fetal Membranes

- Fetal membranes → Not Ruptured.
  → A Condition in which Amniotic sac is over Firm and doesn't open even By Powerful Birth Pain.
- More Common in Swines, Mares.
- **Clinical signs, diagnosis, TTT**:.

Fetal membranes Hanged From external genitalia	Fetal membranes Hanged with the Fetus
↓	↓
Avoid Manual Rupture and Search For the Main Cause	Manual Rupture
↓	↓
To Avoid Retained Placenta.	No Risk of Retained placenta.

- **Prognosis**:.
  1. early Detection → Good.
  2. late Detection → Bad
     - Asphaxia → Death.

③ Torsion of umbilical Cord

- **Def**:. Twisting of umbilical Cord Around itself.
- **Torsion of umbilical Cord more Common in Mare and Sows? Rare in Calves?**

  Due to:.
  1. long umbilical Cord, where length of umbilical Cord to C.R length of Fetus
     - Mare → 2:3
     - Sow → 1:1
  2. Abnormal Violent movement of Fetus.

Animal	umbilical Cord	C.R
Mare	2	3
Swine	1	1
Canine	1	3
Cow	1	4
lamb	1	6
Human	2	1

- **Sequlae**:.

  Decrease Blood supply or prevented To the Fetus
  - Intra-uterine Fetal Death
    - Mummified fetus
    - Infection → Macerated.
  - Pressure Atrophy on parts of Fetus
  - light cases → growth retardation.

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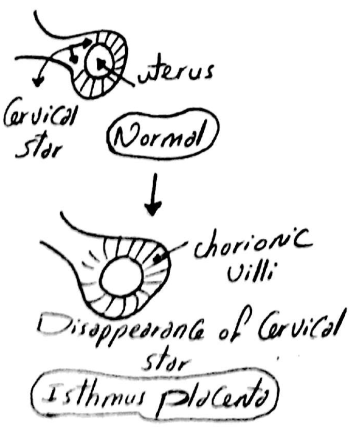
↳ In **Mare** → More than ½ – 2 hrs
Bad or guarded ACC. to Degree of infection.
- Intra-uterine Fetal Death.
- Endometritis.
- Retained Placenta.

• **TTT**
↳ C-section → at once.

④ Anomalies of placenta :-

① Isthmus placentome	② Giant placentome
• In Cow. • Abnormal growth of Accessory placentomes on the Fetal sacs at enterance of Birth Canal → Facing internal Cervical os → Dissappearance of Cervical star.	• over sized placentomes Due to ↝ Abnormal growth ↝ child's head.
	③ the placenta Diffuse Completa
	• Diffused overgrowth of the tissue of the placenta (wholy surface). • Complication:- ① Isthmus placenta. ② Narrowing, obstruction of Birth way. ③ Firm attachment Between Fetal and maternal placenta → Retention of Fetal membranes. • Synonymus:- Advantageous placenta.



مهم ← بنشرح كل حاجة مفهوم بالتفصيل مع اللي قبل كده ←

③ Distrubance of Managemental Causes :-
① unskillful handling. ② unhygienic handling.

③ Distrubance Arising From Fetus :-

① AbNormal Number of Feti: (Twining) :-
- Twin Cause → Dystocia in Cow. → Abortion in Mare.
- Dystocia occur in Twins **Due to** :-
① interCalation or locking of Both Fetus in the maternal pelvis.
② one Fetus is only presented But, Can't Born Due to AbNormal P.P.P.
③ uterine inertia Due to → Pre-mature Birth. → over stitching of uterus.
- **TTT** :- ① Correction and traction. ② C-section.

② Fetal Anomalies :-
TTT :- ① Fetotomy. ② C-section → when Fetotomy Fails.

③ Abnormal P.P.P.

④ Intra-uterine Fetal Death :-

Mummfied Fetus	Maccerrated	emphysematous
• closed Cervix. • No Infection. • stone-like structure.	• open Cervix. • Infection.	• Dystocia • Infection → gas Forming M.o • ↑ size of Fetus

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C-section

• **Def**:.
the extraction of the Fetus from the mother A\ vid Surgical opening in the Abdominal wall and uterus (laparo-hysterectomy).

• **Indication**:. (5)
① Feto-Pelvic Disproportion → Relative or Absolute Big Fetus.
② unCorrected Abnormal P.P.P.
③ Narrow Pelvis + live Fetus.
④ unCorrected uterine Torsion.
⑤ Fetal Congenital Anomalies (as) Ankylosis, Anasarca.
⑥ uterine hemorrhage.
⑦ Dorsal uterine Rupture.
⑧ Vaginal Prolapse - Double Vagina.
⑨ Elective Surgery
↳ Surgical termination of Prolonged gestation
↳ To Avoid existing or suspected Feto-Pelvic disproportion.

• **Contraindication**:. (5)
① long standing infection.
② long standing uterine Torsion ↳ especially of high Form.

• **Location**:.
① Flank laparotomy (Right, left)
② ventro-lateral (oblique).
③ Para-median celiotomy.
④ ventro med line celiotomy.

Item	Flank	ventro-lateral
Site	Between last Rib, Tuber Coxae → in the middle ↳ 25 Cm incision.	oblique incision ↳ 10-15 Cm lateral to Milk vein.
Posture	standing OR Recumbent.	Recumbancy
Advantages	① Common, easy. ② standing Position. ③ Minimal Bleeding ④ Rapid healing ⑤ ↓ Risk Post-operation. ⑥ Avoid shock. ⑦ Avoid wound adherience and herniation.	① excellent exposure to the uterus. ② ↓ Peritoneal Contamination By uterine Content ③ less Scar.
disadv.	أسكس عيوب ventro-lateral	أسكس عيوب Flank

• **Prognosis**:.
① generally → good in any Case of its indication But, Depend on
↳ general health status of Mother.
↳ Condition of Fetus.
② Bad in
↳ Bad general health status of Mother
↳ Infected Birth.
↳ emphysematous Fetus.
↳ Distrehied Fetus.
↳ Ventral Rupture of uterus.
↳ Fracture of Bony Pelvis.
↳ long standing high degree of uterine Torsion.

• **Cases indication For Slaughter**:.
① long standing uterine Torsion.
② Fracture of Bony Pelvis.
③ Sub Normal Temperature.
④ septicemia.
⑤ Ventral uterine Rupture.

(14)

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• Left Flank C-section:-

① Surgical Preparation of instruments.
② Surgical Preparation of the site.
↳ Clipping, shaving, Disinfection
③ Restrain of A1 if needed.
④ Anathesia (1 & 3)
- ① local infilteration
  - ↳ linear infilteration.
  - ↳ inverted L-Block.
- OR ② Regional
  - ↳ Paravertebral Anathesia
    - ↳ T13, L1, L2

using Lido Caine.
⑤ Make incision in skin in one shot then s/c.
⑥ Cut
- ↳ external Abdominal oblique muscle
- ↳ Internal " "
- ↳ Transverse " "

⑦ Peritoneum → opened with tip of scalpel then cut By Blunt scissors under Direction of your hand.
⑧ Careful location of the Pregnant uterus (Fetus → land Mark) → Cavity Filled with Fluid with Bony Parts.
⑨ Catch Bone of the Fetus → Small incision Above it then Continous incision in intercaruncles Space to Avoid Fetal Bleeding.
→ it's advisable to incise uterus From greater curvature to Avoid oozing of Fluid → Peritonitis.
⑩ Anterior Presentation
↳ Fixation of hind limb that Present at incision then traction upward then lateral toward hind limb of Dam.
⑪ loose Placenta removed if it's tight → left.
⑫ incase of Torsion you must correct it then suturing the uterus → Sero-muscular suture → inverted suture (lambert or Cushing) → 2 row → Horizontal lambert then Cushing.
• You Must trim Fetal membranes If Placenta tight at wound Area to Prevent its Suturing with wound.
⑬ Instillation Broad spectrum antibiotic into Abdomen to Avoid infection.
⑭ Peritoneal and uterine will washed By Normal Saline, Penicillin → To Avoid Adhesion

⑲ **Closure:-**
- Ⓐ Peritoneal only or with Transverse Abdominal Muscle.
- Ⓑ internal Abdominal oblique muscle.
- Ⓒ external Abdominal oblique muscle.
  - Ⓑ, Ⓒ → May together.
  - Ⓐ, Ⓑ, Ⓒ → Simple Continous.
    - ↳ absorpable Suture.
- Ⓓ s/c → Sub cuticular Suture Pattern By Absorpable Suture.
- Ⓔ skin → closed with Non-absorpable Suture Material (silk)
  - ↳ Ford interlocking
  - ↳ 3 Simple interrupted

Sutures at the ventral most aspect of the incision For Drainage.

• Complication of C-section and How to Prevent:-

Complication:-
① Contamination of the wound.
② wound dehiscence.
③ Seroma Formation.
④ s/c emphysema.
⑤ Peritonitis.

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⑥ Uterine Adhesion.
⑦ Retained Placenta.
⑧ Metritis.
⑨ Vaginitis.
⑩ Infertility.
⑪ Uterine Torsion still Present.
⑫ Rupture of uterus.

Prevention:

① Good experience and Training.
② well Disinfection and Sterilization.
③ Betadine washing → wound.
④ Trimming of Fetal membrane.
⑤ Uterine omentalization.
⑥ well Suturing with good material.
⑦ Prophylactic Antibiotic.

• Para Median C-section:

- 4-6 Cm lateral to Ventral midline
- 6-8 Cm Caudal to Xiphoid.
- 15-20 Cm Incision.
- Dorsal Recumbency.

Layers → Skin.
→ S/C.
→ Rectus Abdominus Muscle.
→ Peritoneum.

Advantages:

→ less s Cor.
→ good exposure of uterus.

Disadvantages:

→ Wound dehiscence.
→ Risk of Cutting Milk Vein.

Closure:

→ ① Peritoneum (Simple Continous) (Absorpable) + Internal sheath of muscles.
→ ② Rectus Abdominal Muscle (simple continous) (Absorpable)
→ ③ external sheath of Muscle (simple Continous) (Absorpable).
→ ④ S/C → Sub Cuticular Suture.
→ ⑤ Skin → Horizontal Mattress
→ Ford interlocking
(Non - Absorpable)

• Ventro - lateral:

layers, Closure (As) Para - median C-section.

Uterine Torsion التواء

- In Severe Torsion, You Can See the Vulva
  → Directed to one side.
  → During Rectal examination you Can make Sure that → From Broad ligament (13) Thrilling of Middle uterine Artery.
- If Torsion > 180 → 2 Broad ligament Cross with each other
  → Rolling → if Fails → C-section.

Q Cow in late stage of Pregnancy, Suffer From GIT Problem??
→ uterine Torsion.

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